

REMARKS

Claims 2, 3, 7-10, and 13-19 are present in this application. Claim 3 has been withdrawn as a result of a restriction requirement. Claims 2, 7, 15, and 16 are independent claims.

Official Notice

The Final Office Action dated April 16, 2009 is non-responsive.

In the Office Action dated May 19, 2009, the Examiner had taken “Official Notice” with regard to the claimed “scan inverting circuit.” (Office Action at page 8). In the Amendment filed September 19, 2009, the Applicant had requested documentary evidence to support the Examiner’s assertion of “Official Notice.” In the outstanding Final Office Action, the Examiner repeats the statement of “Official Notice” without providing the requested documentary evidence.

Applicant submits that the Examiner has not followed proper procedure for “Official Notice.” According to procedure laid out in MPEP § 2144.03, “If Applicant Challenges a Factual Assertion as Not Properly Officially Noticed or Not Properly Based Upon Common Knowledge, the Examiner Must Support the Finding With Adequate Evidence.”

Applicant requests a new Office Action that provides the required adequate evidence.

§ 112, first paragraph

Claims 2, 7-10 and 13-19 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Applicant respectfully traverses this rejection. In particular, the Office Action alleges that the term “scan inverting circuit” is not enabled.

The present application is concerned with timing of control signals for a two-sided display panel. Thus, Fig. 2 of the present application shows only signal lines for control signals necessary to explain the present invention. Fig. 2 is not a detailed diagram of all signal paths in the display device. For example, the disclosed scan driving circuit 13 generates driving signals for the display panel, but only a “horizontal direction scan signal” is shown in Fig. 2. The “horizontal direction scan signal” is a control signal that controls the direction of horizontal scan in the display panel. The “horizontal direction scan signal” is not the “horizontal scan signal.”

The Examiner insists on an unintended interpretation of the present invention. For example, the Examiner asserts that it is impossible for the row driver (i.e., scan driving circuit) to generate a direction signal that inverts the direction of a horizontal scan. Applicant submits that it is not impossible. As disclosed in the present application, the scan driving circuit 13 generates, in addition to other things such as providing row driving signals, a horizontal direction scan signal hs. It appears that the Examiner has confused this signal with the term “horizontal scan signal.” The “horizontal direction scan signal” is not the same signal as a “horizontal scan signal.” Furthermore, the present application does not disclose that the scan driving circuit 13 generates a horizontal scan signal.

According to the present specification, the scan driving circuit 13 generates a horizontal direction scan signal hs regarding the display panel in synchronism with the frame signal from the image signal source SG. Thus, it can be seen that a reason for generating the “horizontal direction scan signal” at the scan driving circuit is for purposes of timing of this control signal.

The Examiner’s insistence on an incorrect interpretation of the claimed invention cannot be the basis for an assertion of non-enablement. Applicant submits that it is improper to interpret the claims incorrectly, then argue that the invention is not enabled. Instead, Applicant submits that the present invention is enabled for the correct interpretation as described in the specification. Furthermore, the present application discloses necessary control signals, associated timing, and responsible components for enabling one of ordinary skill in the art to make and use the invention.

Applicant requests that the rejection be reconsidered and withdrawn.

§ 103(a) Rejection

Claims 2, 7-10, and 13-19 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 07-244,267 (Fukumoto) in view of U.S. Patent 5,739,545 (Guha), U.S. Patent 5,115,228 (Harris), U.S. Patent 6,232,937 (Jacobson; newly cited), and U.S. Publication 2003/0035198 (Liang). Applicant respectfully traverses this rejection.

As can be seen in Figure 2 of the present application, an embodiment of the present invention provides a specific relationship between timing of control signals for a double sided display panel. Among the control signals for controlling operations of the display panel is a “horizontal direction scan signal” (specification at page 9, lines 6-9). In the disclosed embodiment, the scan driving circuit 13 generates the “horizontal direction scan signal” for the display panel in synchronism with the frame signal. The timing of control signals is shown in Fig. 3.

The present application describes a “scan inverting circuit,” which inverts the “horizontal direction scan signal” per frame, thereby generating a “horizontal direction scan inverted signal” hsi for input to the display panel (specification at page 9, lines 9-12). As can be seen in Fig. 3, the horizontal direction scan inverted signal hsi is provided every other frame period, with the horizontal direction scan signal hs being provided in the alternate frame periods.

Along with providing the “horizontal direction scan inverted signal” to the display panel, the signal is provided and inverted through an inverter 16 to a shutter switching circuit 14. Thus, as shown in Fig. 3, the timing of the shutters of the display panel is synchronized with the timing of the direction of horizontal scan of the display panel (by the control signal “horizontal direction scan inverted signal”).

Applicant submits that the combination of prior art references fails to teach the claimed display apparatus in which the “horizontal direction scan signal” is generated based on the timing of the frame period of the image signal source and controls both the direction of horizontal scan and the timing of shutters for the two sided display panel. The use of a common control signal and respective timing enable a simple control circuit for a two-sided display panel.

Harris which the Office Action relies on for teaching a display control means does not teach generation of a “horizontal direction scan signal” in synchronism with the frame signal that synchronizes timing and controls both the direction of horizontal scan of a display panel (via a horizontal direction scan inverted signal) and the timing of the shutters of the display panel. Applicant submits that the other cited references fail to make up for the above-stated deficiencies in Harris.

Therefore, Applicant submits that the rejection fails to establish *prima facie* obviousness and must be withdrawn.

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact **Robert Downs** Reg. No. 48,222 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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